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REMARKS

Claims 1-20 have been pending in the application.

Claims 1-20 are rejected.

Claims 1, 2, 4, 7, 8, 10, 13, 14, 16 and 20 are cancelled without disclaimer or prejudice.

Claims 3, 5, 6, 9, 11, 12, 15, 17, 18, and 19 are amended.

Therefore, claims 3, 5, 6, 9, 11, 12, 15, 17, 18, and 19 remain pending for reconsideration, which is respectfully requested.

No new matter is being presented, and approval and entry are respectfully requested.

CLAIM REJECTIONS – 35 U.S.C. §102

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mattson, Jr. (U.S. 6,430,741).

Dependent claims 5, 11, and 17 have been amended into independent form. In particular, for example, dependent claim 5 has been amended to incorporate the features of independent claim 1 and dependent claims 2 and 4. Dependent claims 11 and 17 have been amended similarly. Further, the independent claims 5, 11, 17 and 19 have been amended to clarify the patentably distinguishing features of the present invention by emphasizing that in contrast to Mattson, the claimed present invention provides "quantifying the type of access to the data item and the number of accesses, as recorded separately for each process, which are included in said data item access state, and generating quantified data item access state data of each process in said program" (e.g., independent claim 5). Support for the claim amendments can be found, for example, in the claims themselves by reciting, "an analyzer analyzing degree of association relationships between processes and data items based on the access type and the number of accesses of the data item, each said process being at least one of a program, a set of programs and a program section" and on page 6, first paragraph; page 6, lines 17-20; page 8, last paragraph, to page 10 of the present Application. See also, pages 11-17; FIG. 1 (operation 115); FIGS. 2-14 of the present Application.

Mattson discloses the visualization of data accesses, aiming to identify elements in a data table that have not been accessed by specified functions of the application program in the course of running the test suite. With this information, developers may either modify the test

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suite to ensure that all elements in the table are accessed, or examine the unaccessed elements by hand to ensure that they are correct. (Mattson, col.10, lines 43 - 49).

Therefore, according to this aim of Mattson, which data item was accessed is important, *not which function accessed the data item*, or which *type of access was*. So, Mattson does not disclose or suggest counting a data item separately in *every function which accessed the data item*. In Mattson, whichever function specified in "FUNCTION - LIST" accesses same data item in the table, the count of the data item is increased. For example, when function A accessed data item X 6 times, and function B accessed data item X 4 times, the implementation of Mattson's invention counts 10 for data item X. In particular, Mattson, column 6, lines 35-48, and FIG. 2, discloses, "The Trace <TABLE> directive 201 acts to command that function names contained within "FUNCTION-LIST" be instrumented so as to count the number of times elements within the data table "TABLE" are accessed by program instructions associates with functions contained within function list 203 which is here simply called "FUNCTION-LIST." However, Mattson fails to disclose or suggest the claimed present invention's *which function accessed the data item*, or which *type of access by the function* (i.e., "*quantifying the type of access to the data item and the number of accesses, as recorded separately for each process, which are included in said data item access state, and generating quantified data item access state data of each process in said program*" e.g., independent claim 5).

On the other hand, the claimed present invention has a benefit of clarifying groups of processes of various units, and to acquire information useful in system partitioning, especially in a division pattern of the processes. For this benefit of the claimed present invention, the present invention records *data item access state of each process* in a system. So, when function A accessed data item X 6 times, and function B accessed data item X 4 times, the the claimed present invention counts for data item X 6 times in function A, and 4 times in function B, separately. Further the claimed present invention classifies *access type of each process* in order to find a more reasonable division pattern of processes. Mattson does not record access count separately in every process, such that Mattson cannot achieve the claimed present invention.

Also, visualization of data access in Mattson merely shows total access level of data access from all functions specified in "FUNCTION - LIST," because Mattson merely aims to identify elements in the data table that have not been accessed by any functions. From this visualization, it is not possible to find which process accessed which data item, therefore it is

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not possible to divide any pattern of the processes.

As the aforementioned arguments reveal, objects between the claimed present invention and Mattson are totally irrelevant to each other. Therefore, Mattson fails to record data access separately in each process, or, to present a division pattern of processes, which cannot be achieved without recording data access separately by each process as performed in the claimed present invention.

Therefore, in contrast to Mattson, the present invention as recited in independent claims 5, 11, 17 and 19, using claim 1 as an example, provides:

> 5.   (CURRENTLY AMENDED) ~~The~~A system analysis apparatus ~~of claim 4~~analyzing a system containing one or a plurality of programs, comprising:
>
> means for examining, as an access state of a data item in said program, an access type and a number of accesses of the data item in said program; and
>
> an analyzer analyzing degree of association relationships between processes and data items based on the access type and the number of accesses of the data item, each said process being at least one of a program, a set of programs and a program section,
>
> wherein said analyzer further comprises:
>
> means for *quantifying the type of access to the data item and the number of accesses, as recorded separately for each process,* which are included in said data item access state, and *generating quantified data item access state data of each process in said program;*
>
> means for *collecting processes that access to a data item satisfying a predetermined condition* in said quantified data item access state data; and
>
> means for *presenting at least one of a partitioning pattern of the data items and a division pattern of the processes,* using the quantified data item access state data and the collected processes (emphasis added).

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Accordingly, Mattson fails to disclose or suggest the claimed present invention's, *"quantifying the type of access to the data item and the number of accesses, as recorded separately for each process, which are included in said data item access state, and generating quantified data item access state data of each process in said program;... collecting processes that access to a data item satisfying a predetermined condition in said quantified data item access state data; and ... presenting at least one of a partitioning pattern of the data items and a division pattern of the processes, using the quantified data item access state data and the collected processes."*

Mattson does not anticipate the claimed present invention, and in view of the claim amendments and remarks, withdrawal of the rejection of pending claims and allowance of pending claims is respectfully requested.

CONCLUSION

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Respectfully submitted,
STAAS & HALSEY LLP

Date: ___12/13/2004___   By: ___[signature]___

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